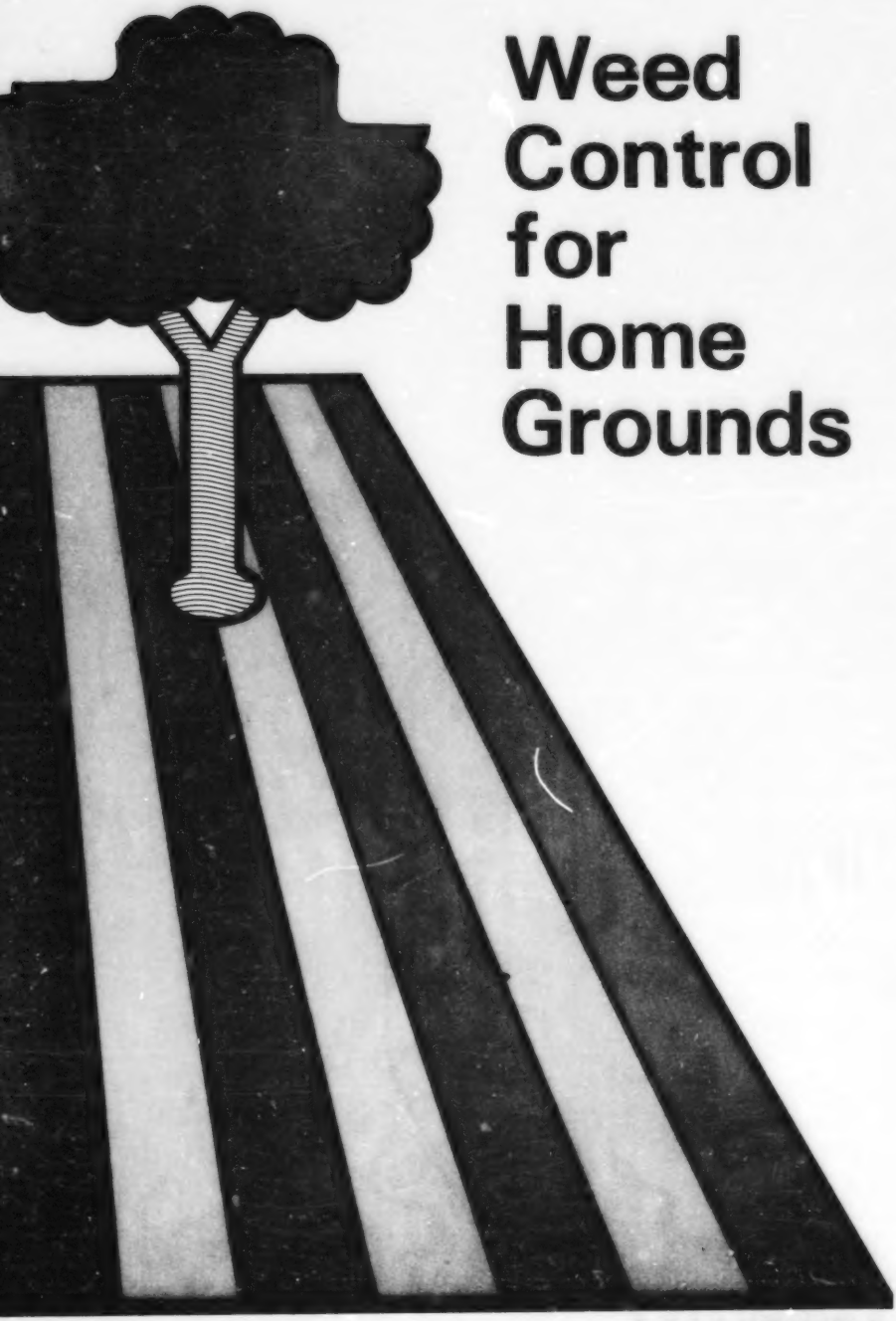

Weed Control for Home Grounds

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AGRICULTURE

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WEED CONTROL FOR HOME GROUNDS

Well kept home grounds not only provide enjoyment for yourself but also enhance the value of your property. This publication provides a guide to the recommended cultural and chemical means for control of intruding weeds in your lawn, garden, ornamental planting or driveway.

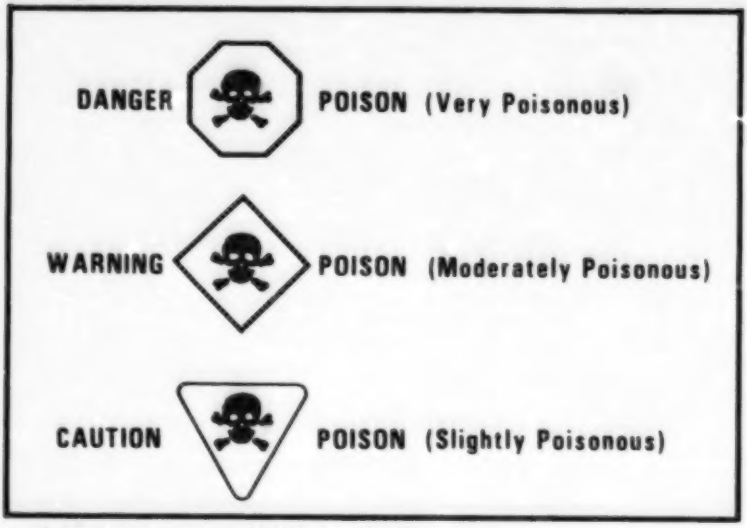
General Control Measures

Effective weed control requires proper identification of the weed problem followed by good cultural or chemical treatment at the correct time. Sound management of your grounds including the use of good growing practices and cultural weed control methods together with herbicides is essential for good weed control.

Recommended chemical weed control is not always completely effective. The action of chemicals depends upon several factors such as the age of a weed, the temperature at which the chemicals are applied, the fertility of the soil and the amount of available moisture. Rainfall or irrigation should not occur within six hours after herbicide application or the activity of the herbicide will be reduced and reapplication of the chemical will be necessary.

Once the particular weed problem is controlled, do not expect it to be permanently eliminated as seeds remaining in the soil may germinate. Topsoil, unrotted manure, or soil around nursery stock may contain weed seeds, stolons, rhizomes and roots. Air borne seeds such as dandelion can move in from a weedy area and seeds carried by birds, floating in run off water or carried on humans and animals can be distributed throughout well kept grounds.

Safety



Look for these signs on herbicide containers.

Know and observe the following safety guidelines in using herbicides:

1. Never smoke while applying herbicides.
2. Avoid inhaling sprays or dusts. Wear protective clothing and a respirator when directed on the label.
3. Have soap, water and towel available. Should concentrated product spill on skin, hands, face or eyes, wash immediately.
4. Wash hands and face when leaving the treated area, before break periods, lunch, or for comfort.
5. Bath or shower and change to clean clothing after working with herbicides. Wash clothing each day before re-use.

6. Call a physician or get the patient to a hospital immediately if symptoms of illness occur during or shortly after herbicide application. Be sure to take along the product label or container.
7. Keep herbicides out of the reach of children.
8. Store herbicides where there is no chance of contact with human food or livestock feeds. Do not store herbicides with insecticides and avoid cross-contamination.
9. Buy herbicides for home use in small quantities.
10. Keep chemicals in their original containers — never in unmarked containers or bottles used for food or drink.
11. Never fill spray tanks directly from a potable water source such as a well or dugout.
12. Use amine formulations of 2,4-D, not esters, as amines provide greater safety by reducing spray drift to susceptible plants.
13. To avoid contact with susceptible plants, control the spray:
    — apply when there is no wind, in early mornings or evenings
    — use low pressure or no pressure applicators
    — protect valuable plants from spray drift by using paper, cloth or other suitable covers.
14. Spray when weeds are young and actively growing.
15. Mark spray applicators "HERBICIDES ONLY". Do not use sprayers or containers for any other purpose.
16. Immediately after use, clean sprayers thoroughly with water and household ammonia. Use 40 to 55 mL (1½ to 2 ounces) of ammonia in 5 L (1 gallon) of water.

IN CASE OF ACCIDENT OR POISONING WITH ANY PESTICIDE, CONTACT YOUR LOCAL HOSPITAL.
FOR FURTHER INFORMATION, CONTACT:

POISON CONTROL
HEALTH SCIENCES CENTRE
CHILDREN'S CENTRE
685 BANNATYNE AVENUE
WINNIPEG, MANITOBA, R3E 0W1
TELEPHONE: 787-2591

Methods of Applying Herbicides

1. A watering can is adequate for applying herbicides in small areas. DO NOT use it for watering the plants afterwards. Keep it for chemical application only.
2. A wax bar containing the active herbicide in the wax is useful for controlling weeds close to border planting and ornamentals. Check the label to be sure the bar does not contain the highly volatile ester of 2,4-D.
3. Foam aerosol applicators are good for spot treatments as the foam containing the herbicide will not drift away from the target plant.
4. Knapsack sprayers are available for the larger areas requiring herbicides.
5. A number of fertilizer and herbicide mixtures are now available. The mixture should be applied at the time optimum for weed control.

Herbicide application equipment.

Weed Control Glossary

ANNUAL — a plant that completes its life cycle from seed in less than one year. Summer annuals begin growth in the spring and mature by fall. Winter annuals begin growth in the fall and mature the following spring or early summer.

BIENNIAL— a plant that lives more than one year but not over two years.

CONTACT CHEMICAL— a chemical that does not move within the plant and has a direct effect only on that part of the plant which is covered by the spray mixture, (example — paraquat).

DIRECTED SPRAY— a spray directed on weeds or soil in such a manner as to avoid contact with desirable plants.

DORMANT— the resting stage of a plant or a seed when it is metabolizing at a reduced rate such as the condition of a plant during the winter.

EMERGENCE— the time at which the seedling first appears above the ground.

FORMULATION— the type of herbicide commercially available, such as ester, amine or sodium salt.

GRANULAR FORMULATION— a herbicide formulated by attaching it to a granular material such as clay, (example–Weedrite Granules.)

HERBICIDE— A chemical which is used to destroy or inhibit growth of weeds.

NON-SELECTIVE HERBICIDE— a herbicide that can be used to control plants generally without regard to species, (example — paraquat).

PERENNIAL— a plant that normally lives for more than two years.

POSTEMERGENCE— herbicide application after the garden, lawn or ornamental planting and weeds emerge.

PREEMERGENCE— herbicide application after the garden or lawn is planted but before the plants emerge from the soil.

PREPLANT— herbicide application before planting of crop.

PRODUCT— the contents of a herbicide container as marketed.

RESISTANT— a plant which is not damaged by a herbicide if applied as recommended, or a weed not controlled by any practical rate of herbicide.

SEEDLING— refers to the early stages of growth of plants, technically a plant prior to the development of a root system other than the seed or seminal root.

SELECTIVE HERBICIDE— a chemical used in such a manner that it will control weeds in the lawn, garden or ornamental planting without damaging the desirable plants, example, 2,4-D used on lawns.

SOIL STERILANT— a chemical that prevents the growth of all plants generally for a period of time.

STALE SEEDBED— a seedbed prepared for planting, with subsequent weed growth controlled with a herbicide, thereby allowing the desired plants to be seeded with minimal soil disturbance.

SURFACTANT— "surface active agents" affect the surface properties of a liquid which in turn influence the performance of a herbicide on both weeds and desired plants. These products are already contained in herbicides when purchased.

SUSCEPTIBLE— desirable plants that may be damaged, or a weed that may be controlled readily by a recommended rate of herbicide.

TANK MIX— two chemicals that are purchased separately and mixed in the sprayer tank — as opposed to a mixture formulated by the manufacturer.

TOLERANCE— the ability of a plant to withstand the effects of a herbicide so that the plant's growth and development are not adversely affected.

TRANSLOCATED HERBICIDE (systemic)— a chemical (herbicide) that moves within the plant, (example — 2,4-D).

WEED CONTROL— the process of limiting weed infestations so that desirable plants can be grown effectively or other operations can be conducted efficiently.

WETTABLE POWDER— a powder that will readily form a suspension in water. Suspensions require agitation to prevent settling of the solid particles.

Weed Control In Lawns

A sound management program on turf that provides vigorous growth of grass helps control weeds. Include fertilizing, watering and cutting to the proper height. However, the application of herbicides may be required to obtain a weed-free lawn. Two herbicide applications are recommended for satisfactory control. The first, prior to May 31, controls susceptible species such as dandelions while the second using herbicide mixtures, controls the hard-to-kill weeds, such as chickweed, clover and creeping Charlie.

Take care in applying herbicides as annual flowering plants and many shrubs are susceptible. Precautions include: use of low-pressure or no-pressure applicators, application on non-windy days only, and the covering up of susceptible plants with newspapers. Remove newspapers shortly after spraying.

New Lawns

Before establishing a lawn by either seeding or sodding, perennial weed problems such as Canada thistle, perennial sow-thistle and quackgrass must be brought under control. One or more flushes of

annual weeds prior to seeding will reduce weed problems later. Precautions should be taken to prevent reinfestation through weeds setting seed, weedseed in lawn seed, and weeds in sod or topsoil.

Amitrol-T (200 g/L, 2.00 lb/gal) Controls quackgrass. Apply 750 mL (26.4 oz) in 25 L (5.5 gal) water/100 square metres (1076 square feet) in late August or in early spring, postemergent to growth of quackgrass. Six weeks later roto till thoroughly and prepare a good seedbed. Seed or sod and top dress.

Co-op Weedrite (5%), Weedrite (5%) Controls topgrowth of weeds. Dissolve one sachet (57 g or 2 oz) in 10 L (2.2 gal) clean water and apply to 20 square metres (215 square feet) with a watering can, dribble bar or sprayer. If weed growth is extremely dense, apply to 10 square metres (108 square feet). Spray to thoroughly wet foliage. This treatment will burn off top growth of all green vegetation. Repeated treatments may be required. After a minimum of three days roto till thoroughly and prepare a good seedbed. Seed or sod and top dress.

Roundup (356 g/L, 3.56 lb/gal) Controls quackgrass. Apply Roundup at 50 to 70 mL (1.75 to 2.46 oz) in 1.5 L (1.32 qt) water/100 square metres (1076 square feet) when quackgrass is at least 20 cm (8 inches) tall. Wait at least five days before roto tilling to prepare the seedbed. Seed or sod and top dress.

2,4-D amine (200 g/L, 2.00 lb/gal) Controls perennial thistles. Apply 75 mL (2.64 oz) in 10 L (2.2 gal) water/100 square metres (1076 square feet). For products with other concentrations refer to label for rates.

New lawns can be sprayed after the first cutting with treatments recommended for established lawns unless otherwise stated. Timely mowing can be used to supplement chemical control.

Established Lawns

CAUTION: *These recommendations are to be followed any time after first cutting. Do not apply these herbicides to bent grass species except where specifically recommended.*

Co-op Lawn Weed Killer (200 g/L, 2.00 lb/gal), Weed No-More (150 g/L, 1.5 lb/gal) Controls perennial thistles, dandelions, plantain, mustard, stinkweed and lamb's-quarters. For best results spray dandelions before blooms appear in spring. Apply 75 mL (2.6 oz) Co-op Lawn Weed Killer in 10 L (2.2 gal) water/100 square metres (1076 square feet). Use half the recommended rate on bent grasses. Apply

Weed No-More at 90 mL (3.17 oz) in 20 L (4.4 gal) water/100 square metres (1076 square feet). For control of dandelion and plantain apply Co-op Premium Spot Weed Killer (ready to use without mixing). Wet the weeds with one or two short bursts.

Co-op Premium Lawn Weed Killer (250 g/L, 2.5 lb/gal), Killex (159 g/L, 1.59 lb/gal) Controls black medick, chickweed, ground ivy (creeping Charlie), knotweed, common plantain, clover and other 2, 4-D resistant weeds. Apply Co-op Premium Lawn Weed Killer at 100 mL (3.52 oz) in 10 L (2.2 gal) water/100 square metres (1076 square feet) of lawn area. Use Killex at 120 mL (4.22 oz) in 20 L (4.4 gal) water/100 square metres (1076 square feet) in spring or early fall when temperatures are above 10C (50F). Do not spray for several days after mowing, during hot spells or when rain is forecast. Killex should not be applied to newly seeded lawns until after the third mowing. For knotweed apply in May when plants are small. To treat ground ivy apply when growth begins and as often as necessary when regrowth appears. Co-op Premium Spot Weed Killer (ready to use), will give similar results. Do not use on bent grasses. Do not water within 24 hours after application.

Super Compitox (200 g/L, 2.00 lb/gal) Controls chickweed, ground ivy (creeping Charlie), knotweed, black medick, clover and other 2,4-D resistant weeds. Apply 125 mL (4.4 oz) in 10 to 20 L (2.2 to 4.4 gal) water/100 square metres (1076 square feet).

Other formulations consisting of aerosols, fertilizer mixes and wax bars are available. These will give weed control if used as directed on the label but are no more effective than the above sprays. Be sure to use the proper chemical, apply as directed on the label and take precautions to prevent drift. Use only amine formulations which are non volatile.

No selective herbicide is available to remove quackgrass in a blue grass lawn. Relatively good control of quackgrass may be obtained by the following maintenance procedures:

- Fertilize two or three times a year to produce a vigorous growth of lawn grass.
- Apply adequate water to promote good growth of the grass.
- Mow lawn twice a week at 4 to 5 cm (1.5 to 2 inches) height during the active period of growth. This will promote continual growth of the lawn grass but will stunt growth of the quackgrass.

For complete control of quackgrass it may be necessary to renovate. Follow recommendations in the section on establishing new lawns for information on quackgrass control.

Cultural Control of Mosses and Mushrooms

Mosses

Mosses are a problem in lawns when growing conditions are unfavourable for grass growth. Low fertility, poor drainage and lack of sunshine hamper grass growth and encourage moss growth. For control:

- Aerate the soil and add fertilizer.
- Improve the drainage and reduce shade by pruning trees and shrubs back or substituting ground covers for turf in shady areas.

NOTE: Moss control agents containing ferrous compounds only give temporary control.

Mushrooms

Mushrooms are found in lawns and sometimes in gardens growing alone or in groups called fairy rings. Their growth is a result of rotting organic matter in the soil and improper fertilizer and moisture levels. Often the grass inside fairy rings will gradually become thin, turn yellow and eventually die. To control:

- Punch holes 15 cm (6 inches) deep in the turf with a garden fork to break up the mycellium and allow for water penetration.
- Soak area with water at one to two day intervals for one month.
- Follow with proper fertilizer applications to promote good grass growth.

Vegetable Gardens

Chemical Control

Because of the wide variety of plants growing in a small area, herbicides have limited use in vegetable gardens. Large gardens can be treated according to recommendations for commercial vegetable production contained in the *Guide to Chemical Weed Control* published annually by Manitoba Agriculture.

Discriminate use of 2,4-D amine, Weedrite and Co-op Weedrite will control weeds growing between rows. Extreme care must be taken to prevent drift onto desirable plants.

Quackgrass and perennial thistles can be controlled according to recommendations for lawn renovation. It may be necessary to leave the area out of production for at least part of the year.

Cultural Weed Control

Hand weeding or hoeing is still an effective method for controlling many weeds. Most annual weeds, can be hoed out and left to dry on the surface for control. Succulent weeds such as purslane which contain a lot of moisture in the stems and leaves, must be removed after hoeing. Otherwise, they will re-establish before drying out. Avoid deep hoeing as it only brings new weed seeds into position for germination.

The use of mulches such as a plastic sheet to control weeds is also an effective cultural control. Large sheets of plastic can be used to control weeds in plantings such as flower beds. Holes cut in the plastic where plants are to be placed will allow the desired plants to grow undisturbed. At the same time weed growth is controlled in the surrounding area.

Shrubs, Trees, Flowers and Ornamentals

Herbicides can be used to control annual weeds, reducing the amount of hand weeding required.

Hoe-No-More (4%), No-Hoe (4%) Controls barnyard grass, green and yellow foxtail, chickweed, lamb's-quarters, pigweed, purslane, ragweed and annual smartweed species. A 500 gram (17.6 oz) package of Hoe-No-More will treat 55 square metres (592 square feet) and a 500 gram (17.6 oz) package of No-Hoe will treat 75 square metres (807 square feet). Refer to label for rates for specific situations. Apply to bare soil or after tilling or hoeing. Do not disturb treated soil. Avoid application to foliage of desirable plants and do not apply when foliage is wet.

Rainfall after application will improve control. If no rain falls within three to four days after application, water the area lightly to activate the herbicide. If water is not available very shallow cultivation may be necessary.

Weeds are controlled as they begin to grow. Control can be expected for six to eight weeks depending on weather conditions.

Co-op Garden Weed Preventer (1.47%) Controls barnyard grass, green and yellow foxtail, chickweed, knotweed, pigweed, lamb's-quarters and annual smartweed species. Apply 3 kg (6.61 lb) product/100 square metre (1076 square feet) or 30 g (1.06 oz) product/1 square metre (10.8 square feet) before weeds emerge. Weeds already growing will not be controlled.

Soil to be treated should be loose and free of clods. Apply by shaking container over the area to be treated. Incorporate into the top 2 cm (0.8 inches) of soil by hand raking. Water lightly. For best results, apply in the spring. For annual flowers apply only after they

become established (about two weeks after transplanting). Use only around ornamentals, shrubs and other established plants not used for food.

Co-op Weedrite (5%), Weedrite (5%) Controls top growth of all weeds. Dissolve one sachet (57 g or 2 oz) in 10 L (2.2 gal) clean water and apply to 20 square metres (215 square feet). If weed growth is extremely dense, double the rate of chemical and water. Can be used around ornamental shrubs and trees. Spray must not contact green bark or foliage. Re-treatment will be required for regrowth of perennial weeds or newly emerged weeds.

Vegetation Burn-Off

Vegetation burn-off refers to the complete top growth control of all vegetation. This type of control is desirable along fence lines, driveways, and patios. *Soil sterilants are not remommended for residential use.*

Co-op Weedrite (5%), Weedrite (5%) Dissolve one sachet (57 g or 2 oz) in 10 L (2.2 gal) clean water and apply to 20 square metres (215 square feet). If weed growth is extremely dense, apply to 10 square metres (108 square feet). Spray must not contact green bark of trees or desirable vegetation. Re-treatment will be required for regrowth of perennial weeds or newly emerged weeds.

Special Weed Problems

Many weed species are introduced as ornamentals and escape to create serious weed problems. Do not plant species which could create a weed problem.

Creeping bellflower/Scentless chamomile/Kochia

Co-op Premium Lawn Weed Killer (250 g/L, 2.5 lb/gal), Killex (159 g/L, 1.59 lb/gal) Apply Co-op Premium Lawn Weed Killer at 100 mL (3.52 oz) in 10 L (2.2 gal) water/100 square metres (1076 square feet) of lawn area or Killex at 120 mL (4.22 oz) in 20 L (4.4 gal) water to 100 square metres (1076 square feet). Spray to give thorough coverage. Apply in early spring or fall and repeat as necessary for regrowth. Good lawn management with frequent mowings will slowly starve the root system of creeping bellflower and will supplement chemical control. Well established plants can be dug out to improve control.

Cypress spurge/snow on the mountain

2,4-D amine (200 g/L, 2.00 lb/gal) Apply 75 mL (2.64 oz) in 10 L (2.2 gal) water/100 square metres (1076 square feet). For products with other concentrations refer to label for rates.

Foxtail barley

Co-op Weedrite (5%), Weedrite (5%) Will not give selective control in a lawn. Dissolve one sachet (57 g or 2 oz) in 10 L (2.2 gal) clean water and apply to 20 square metres (215 square feet). If weed growth is extremely dense, apply to 10 square metres (108 square feet). Re-treatment will be required for regrowth of foxtail barley and newly emerged seedlings. Foxtail barley is an indicator of poor drainage and salinity. Unless the soil problem is corrected reinfestation will occur.

Poison Ivy

Amitrol-T (200 g/L, 2.00 lb/gal) Apply 375 mL (13.19 oz) in 25 L (5.5 gal) water. Thoroughly wet all foliage. Treat after leaves are fully developed in the spring until leaves start to turn colour in the fall. This treatment is not selective.

Roundup (356 g/L, 3.56 lb/gal) Apply 75 to 125 mL (2.64 to 4.40 oz)/100 square metres (1076 square feet) when poison ivy has reached early bud stage. Allow seven or more days after application before tillage. This treatment is not selective.

Purslane (portulaca)

2,4-D amine (200 g/L, 2.00 lb/gal) Apply 75 mL (2.64 oz) in 10 L (2.2 gal) water/100 square metres (1076 square feet) between rows in a garden. For products with other concentrations refer to label for rates. Do not allow the spray mixture to contact or drift onto desirable plants.

Red bartsia

2,4-D amine (200 g/L, 2.00 lb/gal) Apply 75 mL (2.64 oz) in 10 L (2.2 gal) water/100 square metres (1076 square feet). For products with other concentrations refer to label for rates. Treat during early growth, usually in late July. Re-treat if necessary.

Round-leaved mallow

2,4-D amine (200 g/L, 2.00 lb/gal) Apply 75 mL (2.64 oz) in 10 L (2.2 gal) water/100 square metres (1076 square feet). For products with other concentrations refer to label for rates. Apply during early stages of growth.

Scentless chamomile

See creeping bellflower recommendation.

Snow on the mountain

See cypress spurge recommendation.

Herbicide Information

Herbicides recommended are available at most garden supply centres.

TRADE NAME	*GENERIC NAME AND CONCENTRATION*	
Amitrol-T	amitrole	200g/L (2 lb/gal), liquid
Co-op Lawn Weed Killer	2,4-D	200 g/L (2 lb/gal), liquid
Co-op Garden Weed Preventer	trifluralin	1.47% granular
Co-op Premium Lawn Weed Killer	mecoprop + 2,4-D	250 g/L (2.5 lb/gal), liquid
Co-op Premium Spot Weed Killer	mecoprop + 2,4-D	6 g/L (0.06 lb/gal), ready to use liquid
Co-op Weedrite	paraquat + diquat	5% soluble granule
Hoe-No-More	chloramben	4% granular
Killex	mecoprop + 2,4-D + dicamba	159 g/L (1.59 lb/gal), liquid
No-Hoe	chloramben	4% granular
Roundup	glyphosate	356 g/L (3.56 lb/gal), liquid
Super Compitox	mecoprop + 2,4-D	200 g/L (2 lb/gal), liquid
Weed No-More	2,4-D	150 g/L (1.5 lb/gal), liquid
Weedrite	paraquat + diquat	5% soluble granule

Equipment

A wide variety of equipment is available to the homeowner for spraying herbicides. Equipment used depends on the type of application and the size of area being treated.

Here are examples of different types of equipment, ranging from relatively cheap simple machines to the more expensive applicators.

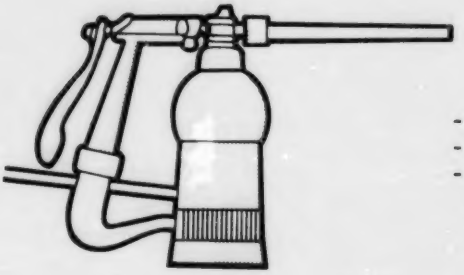
Broom and Pail

- readily available
- cheap
- easy to use
- low drift hazard

Watering Can

- cheap
- easy to use
- low drift hazard

Garden Hose Connecting Sprayer

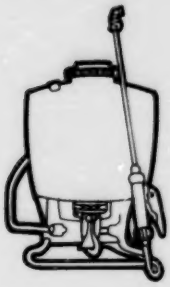


- relatively cheap
- easy to operate
- relatively low drift hazard if operated properly

Hand Sprayer

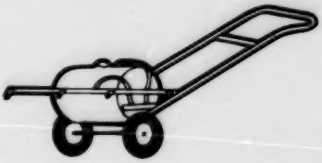
- moderate cost
- easy to operate
- low drift hazard if operated properly

Knapsack Sprayer



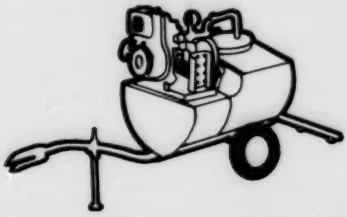
- somewhat higher in cost
- good for treating larger areas such as driveways and fence lines
- convenient to operate
- relatively accurate and low drift hazard if operated properly

Push Type Sprayer



- somewhat higher in cost
- good for larger areas such as lawns
- easy to operate
- relatively accurate and low drift hazard if operated properly

Pull Type Sprayer



- higher in cost
- for use with garden tractor
- good for large lawns, boulevards and parking lots
- accurate and low drift hazard when operated properly

METRIC CONVERSION

Symbols

Length
mm - millimetre
cm - centimetre
m - metre
km - kilometre

Area
m^2 - square metre
ha - hectare

Weight
mg - milligram
g - gram
kg - kilogram
t - tonne

Volume
mL - millilitre
L - litre
m^3 - cubic metre

Pressure
kPa - kilopascal

Temperature
°C - degree Celsius

RELATIONSHIPS

Length
10 mm = 1 cm
100 cm = 1 m
1000 m = 1 km

Area
10 000 m^2 = 1 ha

Weight
1000 mg = 1g
1000 g = 1 kg
1000 kg = 1 t

Volume
1000 mL = 1 L
1000 L = 1 m^3

Length
1 in = 2.54 cm
1 ft = 0.3048 m
1 yd = 0.914 m
1 mile = 1.609 km
1 m = 1.09 yd
1 m = 3.28 ft

Weight
1 oz = 28.35 g
1 lb = 0.4536 kg
1 ton = 0.907 t
1 kg = 2.20 lbs

Area
1 sq in = 6.452 cm^2
1 sq ft = 0.093 m^2
1 sq yd = 0.836 m^2
1 acre = 0.4047 ha
1 sq mile = 256 ha
1 ha = 2.47A (round to 2.5 in most cases)
1 m^2 = 10.8 ft^2
1 m^2 = 1.2 yd^2

Volume

1 fl oz = 28.41 mL
1 fl oz (US) = 29.57 mL
1 pint = 0.568 L
1 quart = 1.137 L
1 gal = 4.546 L
1 US gal = 3.785 L
1 cu in = 16.387 cm^3
1 cu ft = 0.028 m^3
1 cu yd = 0.765 m^3
1L = 0.88 qt
1L = 0.22 gal
1 m^3 = 35.71 ft^3
1 m^3 = 1.31 yd^3

Proportion

1 fl oz/acre = 70.21 mL/ha
1 oz/acre = 70.06 g/ha
1 lb per acre = 1.121 kg/ha
1 lb/in^2 (psi) = 6.895 kPa
1 pint/acre = 1.40 L/ha
1 qt/acre = 2.81 L/ha
1 gal/acre = 11.23 L/ha
1 kg/ha = 0.89 lb/A
1 L/ha = .089 gal/acre

Temperature

°C = 5/9 (°F - 32)
° F = 9/5°C + 32

Related Publications

Identifying Weeds on Home Grounds
Weed Seedling Identification

These publications are available from:

Manitoba Agriculture
Distribution Centre
411 York Avenue
Winnipeg, Manitoba
R3C OV8